



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,284	11/13/2000	Paul W. Dent	P09505-US1	3472
24239	7590	06/07/2005		
MOORE & VAN ALLEN PLLC			EXAMINER	
P.O. BOX 13706			DAVIS, CYNTHIA L	
Research Triangle Park, NC 27709			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/700,284	DENT ET AL.
	Examiner	Art Unit
	Cynthia L Davis	2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-26 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) 12-22 and 26 is/are allowed.
 6) Claim(s) 1-11,23 and 25 is/are rejected.
 7) Claim(s) 24 is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 13 November 2000 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

DETAILED ACTION***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims rejected under 35 U.S.C. 102(e) as being anticipated by *I (U.S. Pat. No. 6088335)*

Regarding claim 1, at a base station, transmitting first predetermined data symbols and unknown data symbols; at the base station, selectively transmitting second predetermined data symbols; at the base station, transmitting an indication when transmission of the second predetermined data symbols is not guaranteed; at a mobile station, decoding transmissions from the base station using at least the first predetermined data symbols is disclosed in *I*, column 10, lines 21-22 (this is a CDMA system, so transmission of the first predetermined and unknown symbols must happen; the mobile being told to retry later is the indication that the second is not guaranteed; the mobile will always decode using the first predetermined data symbols).

Regarding claim 2, decoding the unknown data symbols using only the first predetermined data symbols when the indication is transmitted, and decoding the unknown data symbols using at least one of the first predetermined data symbols and the second predetermined data symbols when no indication is transmitted is disclosed in *I*, column 10, lines 21-22 (the mobile will decode the unknown data symbols using the first predetermined data symbols in either case).

Regarding claim 6, transmitting the indication includes: transmitting the indication when the base station cannot guarantee transmission of the second predetermined data symbols with any of: reliable timing, reliable phase, reliable amplitude and reliable direction continuity is disclosed in column 10, lines 21-22 (the indication is sent when the transmitting cannot be done with reliable timing).

Regarding claim 23, at least one base station to transmit radio signals during a succession of time slots including a current time slot and a subsequent time slot, the radio signals including an indication of whether transmission of the subsequent time slot is guaranteed; at least one mobile station to receive the radio signals in accordance with the indication is disclosed in I, column 10, line 20 (the base station transmits the assignment message, which indicates that the time slot is guaranteed).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over I in view of Ghisler.

Regarding claim 3, the first predetermined data symbols comprise a synchronization word for a current time slot is missing from I. However, Ghisler discloses in column 6, lines 28-30, that each time slot has a synch word. It would have

been obvious to one skilled in the art to transmit a synch word for the current time slot. The motivation would be to synchronize and identify the slot.

Regarding claim 4, the second predetermined data symbols comprise a synchronization word for a subsequent time slot is missing from I. However, Ghisler discloses in column 6, lines 28-30, that each time slot has a synch word. It would have been obvious to one skilled in the art to transmit a synch word for the subsequent time slot. The motivation would be to synchronize and identify the slot.

3. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over I in view of Acampora.

Regarding claim 7, the mobile station transmitting an indicator, the indicator indicating that the mobile station expects transmission of the second predetermined data symbols, and at the base station, in response to the indicator, reliably transmitting the predetermined data symbols, is missing from I. However, Acampora discloses in column 3, lines 37-45, a mobile station transmitting an indicator of QOS requirement, and a base station, if it chooses to admit the mobile, transmitting time slots at the level requested by the mobile. It would have been obvious to one skilled in the art at the time of the invention to use the system of Acampora with the system of I. The motivation would be to guarantee QOS levels to admitted mobile nodes.

Regarding claim 8, the indicator comprising a predetermined data pattern is missing from I. However, Acampora discloses in column 3, lines 37-45, the mobile requesting admission from the base station, which would involve a predetermined data pattern, or the base station would not recognize the request as a request. It would have

been obvious to one skilled in the art at the time of the invention to use the indicator of Acampora with the system of I. The motivation would be to have the mobiles indicate what QOS they need.

Regarding claim 9, the indicator comprising an operational mode indicator for the mobile station is missing from I. However, Acampora in column 3, lines 37-45, discloses the mobile requesting a certain QOS from the base station, which is an indicator of operational mode. It would have been obvious to one skilled in the art at the time of the invention to use the indicator of Acampora with the system of I. The motivation would be to have the mobiles indicate what QOS they need.

Regarding claim 10, at the base station, in response to the identifier, determining the transmission requirements for the mobile station, and transmitting the predetermined data symbols in response to the transmission requirements for the mobile station is missing from I. However, Acampora discloses in column 3, lines 37-45, a mobile station transmitting an indicator of QOS requirement, and a base station, if it chooses to admit the mobile, transmitting time slots at the level requested by the mobile. It would have been obvious to one skilled in the art at the time of the invention to use the system of Acampora with the system of I. The motivation would be to guarantee QOS levels to admitted mobile nodes.

Regarding claim 25, the at least one base station includes a circuit for receiving a signal from a particular mobile station of the at least one mobile station indicative of a type of the particular mobile station, the mobile station being one of a type that requires guaranteed transmission of the subsequent time slot and of a type that does not require

guaranteed transmission of the subsequent time slot is missing from I. However, Acampora in column 3, lines 37-45, discloses the mobile requesting a certain QOS from the base station, which is an indicator of needing guaranteed transmission of a subsequent slot. It would have been obvious to one skilled in the art at the time of the invention to use the indicator of Acampora with the system of I. The motivation would be to have the mobiles indicate what QOS they need.

4. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over I in view of Acampora in view of Civanlar.

Regarding claim 11, the transmission requirements being retrieved from a subscriber database is missing from I. However, Civanlar discloses in column 6, lines 39-42, a database that holds QOS requirements for end user nodes in a network. It would have been obvious to one skilled in the art at the time of the invention to use the database of Civanlar in the system of I. The motivation would be to store the expected QOS's.

Allowable Subject Matter

5. Claims 12-22 and 26 are allowed.

6. Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLD CLD
5/26/2005 5/26/05



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600